

Ch 8 Test--Monday

8.1 Angle Measures in a Polygon

- $(n-2)180$
- 360
- regular

8.2 Properties of a Parallelogram

- facts

$\text{opp sides} \cong$
 $\text{opp sides} \parallel$
 $\text{opp } \angle s \cong$

diagonals bisect each other
 cons. $\angle s$ are suppl.

8.3 Showing a quadrilateral is a Parallelogram

- Converses (5 ways)

- If opp sides \cong , then \square
 - opp sides \parallel ,
 - opp $\angle s \cong$
 - diagonals each other,
 one pair opp is BOTH $\cong + \parallel$,

8.4 Properties of Rectangles, Rhombuses, and Squares

Rect.



- $4 \text{ rt } \angle s$
- diagonals \cong

Rhombus



- $4 \cong \text{sides}$
- diagonals \perp
- diagonals bisect $\angle s$

Square

everything

8.5 Properties of Trapezoids and Kites

one pair \parallel sides

Isosceles Trap

$\text{legs} \cong$
 $\text{base } \angle s \cong$
 $\text{diagonals} \cong$



8.6 Identify Special Quadrilaterals

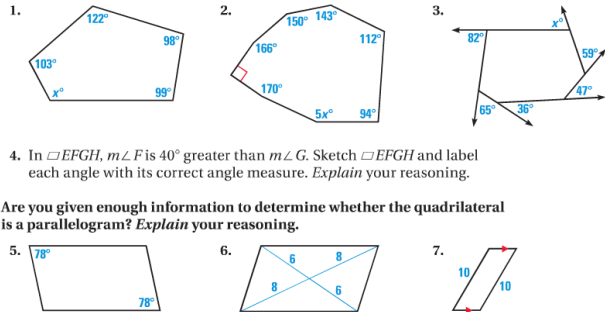
Ch 8 Coordinates

Review assignment
p564 #s 1-12, 14-18
p555 #s 18-24

Be sure to review your proof packets!

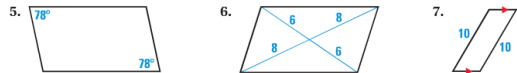
on LL

Find the value of x .



4. In $\square EFGH$, $m\angle F$ is 40° greater than $m\angle G$. Sketch $\square EFGH$ and label each angle with its correct angle measure. *Explain* your reasoning.

Are you given enough information to determine whether the quadrilateral is a parallelogram? *Explain* your reasoning.

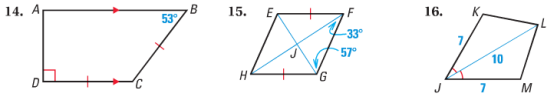


In Exercises 8–11, list each type of quadrilateral—*parallelogram*, *rectangle*, *rhombus*, and *square*—for which the statement is always true.

- 8. It is equilateral.
- 9. Its interior angles are all right angles.
- 10. The diagonals are congruent.
- 11. Opposite sides are parallel.

12. The vertices of quadrilateral $PQRS$ are $P(-2, 0)$, $Q(0, 3)$, $R(6, -1)$, and $S(1, -2)$. Draw $PQRS$ in a coordinate plane. Show that it is a trapezoid.

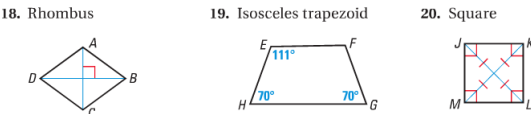
Give the most specific name for the quadrilateral. *Explain* your reasoning.



17. In trapezoid $WXYZ$, $\overline{WX} \parallel \overline{YZ}$, and $YZ = 4.25$ centimeters. The midsegment of trapezoid $WXYZ$ is 2.75 centimeters long. Find WX .

18. In $\square RSTU$, \overline{RS} is 3 centimeters shorter than \overline{ST} . The perimeter of $\square RSTU$ is 42 centimeters. Find RS and ST .

IDENTIFYING QUADRILATERALS Tell whether enough information is given in the diagram to classify the quadrilateral by the indicated name. *Explain*.



COORDINATE PLANE Points P , Q , R , and S are the vertices of a quadrilateral. Give the most specific name for $PQRS$. *Justify* your answer.

- 21. $P(1, 0)$, $Q(1, 2)$, $R(6, 5)$, $S(3, 0)$
- 22. $P(2, 1)$, $Q(6, 1)$, $R(5, 8)$, $S(3, 8)$
- 23. $P(2, 7)$, $Q(6, 9)$, $R(9, 3)$, $S(5, 1)$
- 24. $P(1, 7)$, $Q(5, 8)$, $R(6, 2)$, $S(2, 1)$